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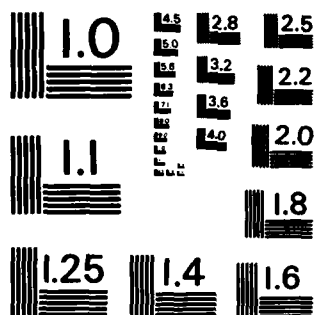
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INDIVIDUAL CHARACTERISTICS, WORK ASSIGNMENTS, AND
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F. BOOTH

F. MCNALLY

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**Individual Characteristics, Work Assignments, and Job
Satisfaction of Navy Hospital Corpsmen ***

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Individual Characteristics, Work Assignments,
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Abstract

Relationships among individual characteristics, work assignments, and job satisfaction were evaluated for 776 Navy hospital corpsmen (HMs) who had been on the job for approximately two years. Ability, interest in health care work, and personality characteristics were related to first enlistment work assignments received by HMs. Substantial work setting differences also were found to affect job satisfaction of HMs; the most satisfying positions were located in relatively clean and spacious facilities, provided more frequent contact with health care professionals, and involved more complex and challenging work activities. The perceived satisfactoriness of particular work assignments was related to an HM's own characteristics. Administrative support positions, particularly those located in medical centers, appeared to be most affected by congruence between individual characteristics and job demands. This finding suggested the need for special procedures to identify individuals with the greatest potential for adjusting satisfactorily to an administrative work role.

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Individual Characteristics, Work Assignments,
and Job Satisfaction of Navy Hospital Corpsmen

Richard F. Booth and Michael S. McNally

Matching people to jobs has been an explicit objective in employee selection and placement programs for many years (Super & Crites, 1962; Lofquist & Davis, 1969). Increasing the correspondence of individual needs and abilities with the conditions and demands of job environments provides one means for improving performance and reducing the incidence of tardiness, absenteeism, illness, and turnover (French, Rodgers, & Cobb, 1974; Mobley, Griffeth, Hand, & Meglino, 1979). A widely used indicator of the extent to which a good person-environment fit has been achieved is job satisfaction (Vroom, 1964; Locke, 1976).

Each year, approximately 3,000 Hospital Corpsmen (HMs) are trained by the Navy Medical Department to provide assistance in the delivery of health care services. Following graduation from an introductory training course, these individuals are assigned to such duty stations as hospitals, dispensaries, ships, and the Fleet Marine Force (FMF). More specific job assignments, such as to wards, outpatient clinics, or administrative offices, are made by local administrators after arrival at the new duty station. In addition, qualified individuals may be given advanced technical training in such specialty areas as laboratory, pharmacy, and radiology.

Working conditions in hospitals are markedly different from working conditions aboard Navy ships. Similarly, working in a technical support position requires different job behaviors than working in an outpatient clinic or administrative office. It is unlikely, therefore, that HMs would find all assignments to be equally satisfying. Satisfaction with a particular work assignment may be determined in part by the individual's own characteristics. For example, individuals with higher levels of ability or more interest in health care may be frustrated in settings where they cannot perform challenging medical work. By identifying work settings and jobs which tend to be most and least satisfying for individuals of high, middle, or low ability and interest, it may be possible to improve the process of HM assignment.

The purpose of this study was to investigate relationships among individual characteristics, work assignments, and job satisfaction. More specifically, the study focused on differences among work settings in relation to HM characteristics and job satisfaction.

Method

Sample

Participants included 766 male Navy enlisted personnel who entered Hospital Corps Class "A" School between February and August, 1973, and who performed effectively as Hospital Corpsmen for at least two years following completion of the course. These individuals were part of a larger sample of 1,234 HMs (Booth, McNally, & Berry, 1978) to whom post-training job satisfaction questionnaires were forwarded; the return rate on this mailout was approximately 64% with many of the failures to return being accounted for by obsolete addresses.

Measures

Four questionnaires were employed in this research: a background information (BI) form, the Navy Vocational Interest Inventory (NVII), the Comrey Personality Scales (CPS), and a job satisfaction questionnaire (JSQ). Questions on the BI included the individual's age and years of schooling. The NVII (Clark, 1961) contained 190 forced-choice triads in which the respondents were asked to identify the activity they preferred most and least. The CPS (Comrey, 1970) included 180 items which provided self-report assessments on eight personality dimensions. Finally, the JSQ contained three job satisfaction items and space where the respondent was asked to describe his duty station and job. The BI, NVII, and CPS were administered to participants at the beginning of Hospital Corps Class "A" School training and the JSQ was forwarded to participants approximately two years after course completion. In addition, General Classification Test (GCT) and Arithmetic Reasoning (ARI) aptitude test scores were obtained from service history files maintained at the Naval Health Research Center.

Composite Scores

Three composite scores were derived from the measures available on each individual. Aptitude, age at enlistment, and schooling information were combined into a single "odds-for-effectiveness" (OFE) score which provided an index of an individual's ability to perform effectively in a paramedical work role; the procedures followed in generating this score are described in detail by Booth, McNally, and Berry (1978). Following procedures specified by Clark

(1961), NVII responses were used to derive a score providing an index of an individual's interest in health care work; this scale was developed by comparing the activity preferences of experienced HMs with the activity preferences of enlistees working in other Navy occupations. Finally, responses to the JSQ questions "How satisfied are you with your present job?," "Do your present duties employ your abilities in the best possible way?," and "Are you often bored?" were combined into a single job satisfaction score following procedures outlined by McDonald and Gunderson (1974).

Work Assignment

The position description provided by each individual on the JSQ was classified by type of medical facility and type of job performed within that facility. Medical facilities were divided into Naval Regional Medical Centers (including hospitals and dispensaries) and operating forces (including ships and the FMF); jobs were divided by function into those providing patient care (including duty on wards and in outpatient clinics), technical support (including such specialties as laboratory, pharmacy, and radiology), and administrative support. Students in technical training courses ($N = 31$) and individuals working at duty stations which were difficult to classify as either medical center or operating forces ($N = 43$) were dropped from subsequent analyses.

Analysis

Means and standard deviations were computed for the OFE, NVII, CPS, and job satisfaction scores of individuals included in each of the six work setting/job type categories. The significance of differences among means was

determined by performing analyses of variance and t-tests. The OFE, NVII, and CPS scores were then correlated with job satisfaction scores for the HMs in each work setting.

Results

The first step was to investigate relationships between HM characteristics and work assignments. Mean ability, interest, and personality scale scores for HMs in each work setting and job assignment category are presented in Table 1 along with analysis of variance results. Overall, these comparisons indicated that the ability and interest levels of HMs varied significantly across work settings and jobs. Generally, regardless of job type, HMs working in medical centers had higher ability and interest scores than HMs serving in the operating forces. Also, regardless of work setting, there was a tendency for technical support personnel to have the highest ability and interest scores, patient care personnel next highest, and administrative support lowest.

Between-group comparisons using the t-test revealed further specific differences. In both medical centers and operating forces, technical support personnel had higher levels of ability and interest than administrative support personnel. In the operating forces technical support personnel also had higher ability and interest than patient care personnel. Furthermore, HMs working in patient care positions at medical centers had higher levels of ability and interest than did HMs working in patient care and administrative positions with the operating forces.

The only personality scale that differentiated among work setting/job assignment categories was the Order dimension; technical support personnel assigned to the operating forces expressed a stronger preference for order

and structure in their daily activities than did patient care personnel in that setting.

(Insert Table 1 about here.)

The second objective of this study was to investigate differences in job satisfaction among HMs assigned to the six work categories. Mean job satisfaction scores and analysis of variance results are shown in Table 1. These results indicated that HMs working in technical support and patient care positions at medical centers were more satisfied with their jobs than HMs working in any other positions. Conversely, administrative support personnel in the operating forces had significantly lower job satisfaction than any other group.

Although the study was designed to focus principally on the six major work setting/job assignment categories, differences in job satisfaction also were evaluated for a more complete breakdown of settings and jobs as shown in Table 2. Medical center work settings were subdivided into hospitals and dispensaries and operating forces settings into ships and the Fleet Marine Force. The hospital setting was subdivided into four new categories—patient care into wards and outpatient clinics and technical support into surgical support and other technical support—and administrative support. The mean scores for these groups in Table 2 indicated a wide range of job satisfaction, and the analysis of variance was significant ($F [13, 762] = 9.46, p < .05$). Among individuals who worked in hospitals, it was found that the surgical and administrative support personnel were much less satisfied with their jobs than HMs in other positions. Among individuals assigned to the operating forces, HMs working in patient care and technical support positions aboard ships were the most satisfied with their jobs while job satisfaction of HMs serving with the

FMF was low, regardless of the types of duties being performed.

(Insert Table 2 about here.)

The final step in this study was to investigate the relationship between HM characteristics and job attitudes in different work settings. Correlations of the ability, interest, and personality measures with job satisfaction scores are presented in Table 3 for HMs working in each of the six major duty station and job assignment categories. These results reveal that satisfaction with administrative jobs was significantly related to an individual's personality characteristics. HMs who were most satisfied with administrative jobs in medical centers described themselves as preferring order and structure in their daily activities, as accepting of control by others and respecting the laws and institutions of society, as liking hard work and striving to excel, and as being self-confident. In the operating forces, HMs who were most satisfied with administrative jobs described themselves as preferring structure and order in their daily routines and as being less attracted to masculine activities. In technical support positions, job satisfaction was related to an individual's level of interest in health care work: High interest was associated with high job satisfaction in a medical center environment but with low job satisfaction in an operating forces environment. Inpatient care positions, lower ability levels and a sympathetic approach to helping others were associated with high job satisfaction in the operating forces environment, and acceptance of control by others was associated with high job satisfaction in the medical center environment.

(Insert Table 3 about here.)

Discussion

Ability, interest in health care, and personality characteristics all had significant relationships to first enlistment work assignments of hospital corpsmen. This was true not only for technical support positions where more stringent selection requirements apply but also for patient care positions at medical centers and in the operating forces. It is not known to what extent self selection or individual preference operated to determine such assignments as opposed to administrative judgments. Undoubtedly a combination of both was involved.

Work setting had a significant impact on the job satisfaction of corpsmen. This finding was consistent with results of an earlier study of job attitudes among Fleet Marine Force HMs (Booth, McNally, & Berry, 1979). In the present study, the most satisfying positions were located in relatively clean and spacious facilities, provided more frequent contact with health care professionals, and involved more complex and challenging work activities. In contrast to other technical support personnel, surgical support personnel reported low levels of job satisfaction. This result is consistent with the low reenlistment rate for this group and suggests the need for further study to pin-point the reasons for this disparity.

Job satisfaction also was related to HMs' ability, interest in health care work, and personality characteristics. Administrative support positions were most affected by congruence between individual characteristics and job demands. Guidance for these jobs should emphasize the special requirements of administrative work roles. The low levels of job satisfaction found among

corpsmen assigned to the Fleet Marine Force, regardless of type of job, suggested that the characteristics of this work environment differed so greatly from the needs and expectations of most HMs that achieving a good person-environment fit would be difficult at best.

The present investigation was based upon a broad sampling of consenting survey participants who were distributed over a wide array of work assignments and settings (Norton, Booth, & Webster, 1976). The results clearly demonstrated that work assignments and settings significantly affected job satisfaction in relation to the corpsman's ability, interest, and personality. Future studies should concentrate not only upon improving rewards and incentives in work assignments and settings where job satisfaction is critically low but upon developing better selection and placement procedures for HMs based upon abilities, interests, and personality. Personality characteristics appeared to be particularly applicable to predicting job satisfaction in administrative support positions.

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Table 1

Differences in Ability, Interest, Personality, and Job Satisfaction by Duty Station and Work Assignment

	Medical Center				Operating Forces				F- Ratio				
	Patient Care		Technical Support		Admin. Support		Technical Support			Admin. Support			
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.		Mean	S.D.		
Ability (OFE)	72.9	17.3	76.7	15.1	69.1	20.9	66.7	19.6	72.6	17.7	65.7	21.9	7.338*
Interest	32.5	9.6	34.7	8.3	31.1	11.1	30.5	11.4	33.9	11.3	29.4	10.6	4.690*
Personality Characteristics													
Trust	85.3	9.6	84.2	11.5	84.3	10.8	83.4	11.5	87.0	13.4	84.8	10.6	0.951
Order	93.0	14.3	93.1	14.7	92.2	15.2	91.1	14.7	97.3	12.8	92.3	13.4	5.257*
Conformity	88.1	14.3	88.6	15.2	87.9	15.6	88.5	13.6	92.9	9.5	92.2	13.0	1.573
Activity	98.3	13.0	97.9	13.5	98.6	12.7	97.0	12.8	97.1	14.0	96.7	12.9	0.397
Emotional Stability	101.0	14.6	99.6	14.3	98.3	15.5	99.1	14.2	104.0	11.2	98.5	15.5	1.132
Extraversion	91.0	18.9	88.9	17.1	88.2	16.7	88.4	18.7	88.6	17.6	88.7	19.3	0.598
Masculinity	90.2	11.4	89.9	11.9	89.4	12.9	90.1	11.7	86.8	11.1	88.7	11.1	0.577
Empathy	102.5	13.3	101.3	13.1	101.9	14.1	99.3	13.8	105.2	15.7	102.7	14.4	1.737
Job Satisfaction	7.4	1.6	7.4	1.6	6.7	1.8	6.5	1.9	6.9	1.6	5.7	1.9	17.035*
N	239		166		76		186		25		84		

*p < .05

Table 2

Differences in Job Satisfaction by Work Setting and Assignment^a

<u>Work Setting</u>	<u>N</u>	<u>Mean</u>	<u>S.D.</u>
<u>Hospital:</u>			
Ward	62	7.3	1.6
Outpatient Clinic	96	7.6	1.5
Surgical Support	48	6.6	1.8
Other Technical Support ^b	66	8.0	1.3
Administrative Support	54	6.6	1.8
<u>Dispensary:</u>			
Patient Care	81	7.1	1.6
Technical Support	52	7.5	1.3
Administrative Support	22	7.1	1.8
<u>Ship:</u>			
Patient Care	96	6.9	1.9
Technical Support	18	7.1	1.7
Administrative Support	29	6.1	1.6
<u>Fleet Marine Force:</u>			
Patient Care	90	6.0	1.9
Technical Support	7	6.4	1.5
Administrative Support	55	5.6	2.0
Total	776	6.9	1.8

^aDifferences among means were significant ($F(13, 762) = 9.46; p < .05$).

^bSurgical personnel were excluded from the Technical Support group for the Hospital setting only.

Table 3
Correlations between Corpsman Characteristics and Job Satisfaction in Various Work Settings

	<u>Medical Center</u>			<u>Operating Forces</u>		
	<u>Patient Care</u>	<u>Technical Support</u>	<u>Admin. Support</u>	<u>Patient Care</u>	<u>Technical Support</u>	<u>Admin. Support</u>
Ability	.06	.01	.04	-.19*	-.17	-.15
Interest	.12	.20*	.06	.07	-.47*	.00
<u>Personality Characteristics</u>						
Trust	.10	.05	.11	.05	.25	.06
Order	.07	.08	.36*	-.01	-.03	.21*
Conformity	.14*	.06	.33*	.11	-.10	.16
Activity	.09	.03	.27*	.07	-.14	-.11
Emotional Stability	.08	.00	.32*	.08	.05	-.20
Extraversion	.11	-.07	.07	.11	-.16	-.20
Masculinity	.08	.07	-.08	-.02	.20	-.23*
Empathy	.10	.11	.18	.13*	-.21	.11
N	239	166	76	186	25	84
r _{.05}	.13	.15	.22	.14	.39	.21

*p < .05

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